SAFETY MESSAGE

Your Personal Safety is our #1 priority

How Noise Affects Hearing

The aging process

Hearing loss is a normal part of the aging process. Throughout our lives we are exposed to loud noises and physical conditions that add up to gradual loss of hearing.

Many of us lose our hearing prematurely by failing to protect ourselves from excess noise, both at home and in the workplace.

Understanding how hearing works can help you realize the importance of protecting your hearing now, before it's too late.

How hearing works

The ear is composed of numerous delicate structures designed to carry sound waves to the brain. The hair cells in the inner ear are particularly important because they stimulate the auditory nerve, which transmits impulses to the brain. The brain translates the auditory impulses into the sounds that we hear.

When the ear's hair cells become damaged due to excess noise exposure, the auditory nerve is not sufficiently stimulated. The brain does not receive the appropriate sound signal, and we fail to hear correctly. When hair cells are damaged by prolonged overexposure to loud noise, they "die" and cannot be replaced, resulting in permanent hearing loss.

Excess noise exposure

Noise is measured in units called decibels (dBs or dBAs). Excess noise is generally considered to be exposure to 85 - 90 decibels or more over an 8-hour period.

A typical automobile horn can be as loud as 120 decibels, but hearing a horn honk for 10 seconds is unlikely to cause hearing loss. However, if you had to listen to the horn blast for 8 hours straight, you could very well experience gradual, permanent hearing loss.

If you work in a factory and are exposed to 80 decibels of noise over a 4 hour period, you might not be at risk. But, if you went home and operated a power mower or tools, listened to high-volume music, or perhaps practiced at the shooting range, you could very well exceed your safe noise exposure limit.

Protect your hearing

On or off the job, you can protect your hearing by wearing the appropriate personal protective equipment recommended for your tasks.

Ear muffs, plugs, and canal caps can all reduce the amount of noise to which your ears are exposed.

It also helps to know the decibel range or noise level of some common activities and situations to see if you may be exposing yourself to too much noise.

Remember that loud vacuum cleaners, dishwashers, and home power tools can create excessive noise, so protect your hearing wherever you are.